Applicant: David Shen Attorney's Docket No.: 18085-004001

Serial No.: 10/729,674

Filed: December 5, 2003

Page : 2 of 6

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A multiple frequency band receiver for selecting a multiple frequency band RF signal and having reduced number of components in a RF front end system, the receiver comprising:

an amplifier for each frequency band with <u>an</u> output connected to <u>an</u> input of an filter for each frequency band, <u>wherein</u> the output of said filters <u>for each frequency band is coupled</u> connected to <u>an</u> input of a buffer stage for <u>said</u> each frequency band, and <u>an</u> the output of each said buffer stage <u>is coupled connected</u> together; and,

a mechanism to power down <u>each of</u> the buffer stages in order to select a frequency band; wherein the said filters can be any filter types including all pass.

- 2. (Currently Amended) The receiver of claim 1 wherein the receiver <u>comprises an</u> architecture <u>that</u> is <u>any of</u> a superheterodyne <u>architecture</u>, a low-intermediate frequency, a direct conversion, or a quasi-direct conversion type.
- 3. (Currently Amended) The receiver of claim 1 wherein the output of <u>each of said</u> buffer stages is connected to <u>an the</u> input of a mixer.
- 4. (Currently Amended) The receiver of claim 1 further comprising a low noise amplifier (LNA) for <u>said</u> each frequency band and each of the non-selected frequency bands, wherein the receiver is configured to power which can be powered down the non-selected frequency bands to improve isolation of the non-selected frequency bands.

Applicant: David Shen Attorney's Docket No.: 18085-004001

Serial No.: 10/729,674

Filed: December 5, 2003

Page : 3 of 6

5. (Currently Amended) The receiver of claim 1 wherein <u>each of</u> the buffer stages comprise of emitter follower circuits.

- 6. (Currently Amended) The receiver of claim 1 wherein <u>each of</u> the buffer stages comprise of source follower circuits.
- 7. (Currently Amended) The receiver of claim 1 wherein <u>each of</u> the buffer stages comprise <u>an</u> of any known amplifier topology including a low noise amplifier with power down capability.
- 8. (Currently Amended) The receiver of claim 1 wherein <u>a</u> the number of selectable frequency bands is an integer N, where N>1.
- 9. (Currently Amended) The receiver of claim 1 wherein the said filters are external components to an the RF chip.
- 10. (Currently Amended) The receiver of claim 1 wherein the said filters are integrated resonant elements on an the RF chip.
- 11. (Previously Presented) The receiver of claim 1 wherein the receiver is implemented with CMOS, bipolar, BiCMOS, or SiGe technologies.
- 12. (Currently Amended) A method of receiving multiple frequency bands by selecting a multiple frequency band RF signal and of reducing the <u>a</u> number of components in a<u>n</u> RF front end system, the method comprising:

amplifying a multiple frequency band RF signal for each frequency band;

filtering said amplified multiple frequency band RF signal for <u>said</u> each frequency band; by any types of filters including all pass.

buffering said filtered multiple frequency band RF signal for <u>said</u> each frequency band <u>with by</u> buffer stages <u>that have with</u> outputs connected together; <u>and</u>,

Applicant: David Shen Attorney's Docket No.: 18085-004001

Serial No.: 10/729,674

Filed: December 5, 2003

Page : 4 of 6

powering down the buffer stages to select a frequency band.

13. (Currently Amended) The method of claim 12 13 wherein the method of receiving comprises receiving with a receiver architecture type that comprises any of is a superheterodyne, a low-intermediate frequency, a direct conversion or a quasi-direct conversion type.

- 14. (Currently Amended) The method of claim 12 13 wherein the buffered and band selected RF signal is mixed by a mixer.
- 15. (Currently Amended) The method of claim 12 13 wherein the multiple frequency band RF signal is further amplified by a low noise amplifier (LNA) for each frequency band and the a non-selected frequency band is configured to be ean be powered down to improve isolation of the non-selected frequency band.
- 16. (Currently Amended) The method of claim 12 13 wherein the buffer stages comprise of emitter follower or source follower circuits.
- 17. (Currently Amended) The method of claim 12 13 wherein the buffer stages comprise of a low noise amplifier with power down capability.
- 18. (Currently Amended) The method of claim 12 13 wherein the buffer stages comprise an of any known amplifier topology including a low noise amplifier with power down capability.
- 19. (Currently Amended) The method of claim 12 13 wherein a the number of selectable frequency bands is an integer N, where N>1.